## DETAILED ACTION

### *Response to Amendment*

1.      Applicant's Amendment filed on 12/14/2009 has been entered with amended

claims 1-3, 5-7, 9-13, 24-27 and no added claims or cancelled claims.  In this Office

Action, claims 1-31 are pending.

### *Specification*

2.      **Abstract of the Invention** is objected.  Because, it is a copy of claims and

Applicant is reminded of the proper content of an abstract of the disclosure.

A patent abstract is a concise statement of the technical disclosure of the patent

and should include that which is new in the art to which the invention pertains.  If the

patent is of a basic nature, the entire technical disclosure may be new in the art, and the

abstract should be directed to the entire disclosure.  If the patent is in the nature of an

improvement in an old apparatus, process, product, or composition, the abstract should

include the technical disclosure of the improvement.  In certain patents, particularly

those for compounds and compositions, wherein the process for making and/or the use

thereof are not obvious, the abstract should set forth a process for making and/or use

thereof.  If the new technical disclosure involves modifications or alternatives, the

abstract should mention by way of example the preferred modification or alternative.

The abstract should not refer to purported merits or speculative applications of

the invention and should not compare the invention with the prior art.

Where applicable, the abstract should include the following:

(1) if a machine or apparatus, its organization and operation;

(2) if an article, its method of making;

(3) if a chemical compound, its identity and use;

(4) if a mixture, its ingredients;

(5) if a process, the steps.

Extensive mechanical and design details of apparatus should not be given.


3.      The **summary of the invention** not included in the specification.  A summary is

required that is clearly indicative of the invention to which the claims are directed.  See

MPEP §§ 608.01(d).

The following guidelines illustrate the preferred layout for the specification of a

utility application.  These guidelines are suggested for the applicant's use.


Arrangement of the Specification

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading.  If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

(a) TITLE OF THE INVENTION.
(b) CROSS-REFERENCE TO RELATED APPLICATIONS.
(c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
(d) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC (See 37 CFR
        1.52(e)(5) and MPEP 608.05.  Computer program listings (37 CFR 1.96(c)), "Sequence Listings" (37 CFR
        1.821(c)), and tables having more than 50 pages of text are permitted to be submitted on compact discs.) or
        REFERENCE TO A "MICROFICHE APPENDIX" (See MPEP § 608.05(a). "Microfiche Appendices" were
        accepted by the Office until March 1, 2001.)
(e) BACKGROUND OF THE INVENTION.
        (1) Field of the Invention.
        (2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.
(f) **BRIEF SUMMARY OF THE INVENTION**.
(g) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).

(h) DETAILED DESCRIPTION OF THE INVENTION.
(i) CLAIM OR CLAIMS (commencing on a separate sheet).
(j) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).
(k) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if
    the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the
    required "Sequence Listing" is not submitted as an electronic document on compact disc).

## *Claim Objections*

4.      Regarding claims 1-2, 13, 15, 24-31, the phrase "being" renders the claim

indefinite because it is unclear whether the limitations following the phrase are part of

the claimed invention.  See MPEP § 2173.05(d). For example, in claim 1, line 5, as

"locations **being** operated" and in claim 2,  line 3, as "sectors **being** operated."

5.      Applicant amended claims 1, 5, 9-13 and 24 with the phrase "a [the] group of"

whereas the specification does not support and examiner from the broad interpretation

that the phrase as a non-important one.

## *Claim Rejections - 35 USC § 102*

6.      The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United

States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the

United States before the invention by the applicant for patent, except that an international application filed under the treaty

defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if

the international application designated the United States and was published under Article 21(2) of such treaty in the English

language.

7.      Claims 1-10, 13-22, 24-31 are rejected under 35 U.S.C. 102(e) as being

anticipated by Maeda et al. (7,533,378) hereinafter Maeda.


8.      As per independent claims 1, 13, 24, Maesa teaches the claimed, a method

comprising creating a data structure to store progress information on one or more

concurrent operations to access a file system of a non-volatile memory (Fig. 20, col. 17,

lines 53-54, and col. 3, lines 42-33),

        wherein the progress information comprises one or more locations being

operated by the concurrent operations, the data structure further comprises address

information to link the concurrent operations (Fig. 5, col. 10, lines 36-42 and col. 11,

lines 33-39); and

        executing the one or more concurrent operations concurrently based on the

progress information and the address information (col. 5, lines 23-26).

The other limitation of claim 13, Maesa teaches the claimed, volatile memory (see

Fig. 30, element 2340).


9.      As per dependent claims 2, 14, 25, further comprising initializing the progress

information to include the one or more locations of sectors being operated in each

concurrent operations (col. 7, lines 49-52, col. 11, lines 33-35 ).

10.     As per dependent claims 3, 20, further comprising retrieving the progress

information to obtain one or more locations of sectors of the file system associated with

each concurrent operation (col. 3, lines 43-47, and  col. 11, lines 33-35).


11.     As per dependent claims 4, 15, further comprising operating on a fragment of the

file system as indicated by the progress information according to each concurrent

operation (Fig. 7, col. 12, lines 35-40).


12.     As per dependent claims 5, 16, 26, further comprising updating the progress

information associated with a concurrent operation, in response to the completion of the

concurrent operation on a fragment of the file system (Fig. 5, col. 10, line 66 to col. 11,

line 3).


13.     As per dependent claims 6, 17, 27, further comprising from the progress

information associated with the concurrent operation, deleting one or more locations of

a non-fragment unit of the file system associated with the fragment (Fig. 18, col. 15,

lines 47-50).


14.     As per dependent claims 7, 18, 28, further comprising continuing each

concurrent operation on one or more fragments of the file system, in response to

determining that the progress information associated with the concurrent operation

comprises one or more locations of a non-fragment unit of the file system associated

with the one or more fragments (Fig. 10, col. 13, line 64 to col. 14, line 3).

15.    As per dependent claims 8, 19, 29, further comprising removing the progress

information for each concurrent operation, in response to determining that the

concurrent operation on the file system is completed (Fig. 16, 18, col. 15, lines 47-52).

16.    As per dependent claims 9, 21, 30, further comprising in response to determining

that one concurrent operation moves one or more locations of a non-fragment unit of

the file system to one or more new locations, updating the progress information relating

to the one or more locations with the one or more new locations (Fig. 10, col. 13, line 64

to col. 14, line 1 and lines 3-6).

17.    As per dependent claims 10, 22, 31, further comprising in response to

determining that a write operation replaces one or more sequence tables of the file

system by one or more new sequence tables, updating the progress information on the

one or more sequence tables with progress information on the one or more new

sequence tables (Fig. 17, col. 15, lines 31-35).

## *Claim Rejections - 35 USC § 103*

18.    The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set

forth in section 102 of this title, if the differences between the subject matter sought to be patented and

the prior art are such that the subject matter as a whole would have been obvious at the time the

invention was made to a person having ordinary skill in the art to which said subject matter pertains.

Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35

U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly

owned at the time any inventions covered therein were made absent any evidence to the contrary.

Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates

of each claim that was not commonly owned at the time a later invention was made in order for the

examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior

art under 35 U.S.C. 103(a).

19.    Claims 11-12 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Maeda et al. (7,533,378) hereinafter Maeda, and in view of Barreh et al. (US

Patent 7,185,178) hereinafter Barreh.

20.    As per dependent claims 11-12, 23, Maeda does not explicitly teach detecting

one or more high priority concurrent operations.  However, Barreh teaches the claimed,

detecting whether there are one or more high priority operations in the one or more

concurrent operations, during executing each concurrent operation on a fragment of the

file system as identified by the progress info and further comprising in response to

detecting one or more high priority operations, performing the one or more high priority

operations after completing the concurrent operations on the fragment (Fig. 1, col. 3,

lines 45-58). Thus, it would have been obvious to one of ordinary skill in the data

processing art at the time of the invention, to have combine the teachings of the cited

references because Barreh's teachings would have allowed Maeda's method teaches in

multithreaded processors, the instruction cache is shared between two or more threads,

by providing a fetch mechanism to permit the different threads to fetch from the

instruction cache. (col. 1, lines 23-26).

### *Response to Arguments*

21.     Applicant's arguments filed on 12/14/2009 have been fully considered but they

are not persuasive and details are;

      a)     Applicant's argument regarding specification objection stated as:

      **Abstract** – "Applicant respectfully requests the objection to the Abstract of

the Invention be withdrawn in light of the present amendments."

      In response to Applicant argument, Examiner respectfully disagrees.

Because merely adding a limitation to claims will not change abstract. The

abstract is objected as a copy of claims. Therefore, the objection is maintained,

see MPEP 608.01(b) for details.

**Summary** – "For example, 37 C.F.R. §1.73 only states that a "Summary of the Invention" should or may be included. It does not state "must" or "shall."

In response to Applicant argument, Examiner respectfully disagrees. Because, Applicant clearly found from the MPEP as a **Summary of the Invention should be included**. When others read your patent Summary, they can read summary understand about the patent. Therefore, the objection is maintained, see MPEP 608.01(d) for details.

b)      Applicant's argument regarding 35 U.S.C. 101 rejection stated as "Applicant respectfully requests the rejections to claims 1-12 be withdrawn in light of the present amendments."

In response to Applicant argument, Examiner agrees and the rejection has been withdrawn.

c)      Applicant's arguments with respect to claims 1-31 have been considered but are persuasive the prior art by Maeda teaches the added limitations "the progress information comprises one or more locations being operated by the concurrent operations, the data structure further comprises address information to link that concurrent operations; and executing the one or more concurrent operations concurrently based on the progress information and the address information at  Fig. 5, col. 10, lines 36-42 and col. 11, lines 33-39.

### *Conclusion*

22.      **THIS ACTION IS MADE FINAL.**  Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action.  In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action.  In no event, however, will the statutory period for reply expire later

than SIX MONTHS from the mailing date of this final action.

### *Contact Information*

23.    Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Sathyanarayan Pannala whose telephone number is

(571) 272-4115.  The examiner can normally be reached on 8:30 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Charles Rones can be reached on (571) 272-4085.  The fax phone number

for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system.  Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov.

Should you have questions on access to the Private PAIR system, contact the

Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like

assistance from a USPTO Customer Service Representative or access to the

automated information system, call 800-786-9199 (IN USA OR CANADA) or

571-272-1000.

/Sathyanarayan  Pannala/
Primary Examiner, Art Unit 2164

srp
March 27, 2010